AMENDMENTS TO THE CLAIMS

Claims 1-47. Canceled.

48. (Currently amended) An image display system comprising:

(a) at least one complementary screen of one of light emitting or light source modulating devices producing light in a two dimensional array of N (a real number) pixels, from which array of pixels a plurality of raster elements are generated;

(b) a raster multiplying system comprising an array of optically inter-related light dividing elements, each said light dividing element to divide the light of said plurality of raster elements of the complementary screen into parts, a first section of said array arranged to directly receive light from said complementary screen, a part of which directly received light is passed to at least one other section of said array, the light directly received by said first section of said array and the light passed to said at least one other section of said array divided into components to form copies of the raster elements, with said copies of said raster elements forming corresponding raster elements in P blocks, each block of said P blocks generally comprising a two dimensional array of said raster element copies;

(c) an array of controllable modulators located after said raster multiplying system, each modulator of said array to independently modulate the raster elements of one of said P blocks so that light in each block is modulated separately and simultaneously; and

(d) a single image display surface on which said P image blocks of a total number of M pixels are formed and displayed, where the number M exceeds the number N and where said surface preceding components of (a), (b) and (c) are placed in the mentioned order of the light path of the complementary screen.

Claim 49. Canceled.

50. (Previously presented) A system as in claim 48, further comprising a plurality of said complementary screens.

Claims 51-54. Canceled.

55. (Previously presented) A system as in claim 71 further comprising a plurality of said complementary screens.

56. (Previously presented) A system as in claim 71 further comprising means for optic compression of generated raster elements for increasing the brightness and pixel density of a scanning light beam.

57. (Currently amended) A method for forming an image on an image display surface by forming a plurality of constituent blocks of said image, so that the image is presented as comprised of a plurality of blocks, comprising the steps of:

(a) providing at least one complementary screen having a two dimensional array of N pixels and generating from said array of pixels a plurality of raster elements;

(b) using a raster multiplying system comprising an array of optically inter-related light dividing elements arranged so that a first section of said array directly receives light from said complementary screen light and passes another part of the directly received light to another section of said array, dividing the light directly received by said first section of said array and the light passed to said at least one other section of said array into components to form copies of the raster elements, said copies of said raster elements forming corresponding raster element in P blocks, each block of said P blocks generally comprising a two dimensional array of raster element copies;

(c) independently modulating said beam components corresponding to the raster element copies of each of said P blocks;

(d) repeating the procedure of generating other raster elements from said complementary screen; and

(e) displaying the P image blocks having a total number of M pixels on ~~an~~ a single image display surface, where M is greater than N.

58. (Previously presented) A method as in claim 57 further comprising the step of using a plurality of complementary screens.

59. (Previously presented) A method as in claim 57 wherein a raster element comprises more than one pixel.

60. (Previously presented) A method as in claim 59, further comprising the step of subjecting a generated raster element to additional optical compression for increasing the brightness and pixel density of a sensitive plane scanning beam.

61. (Previously presented) A method as in claim 57 wherein a raster element is of the size of only one pixel.

Claims 62-66. Canceled.

67. (Previously presented) A method as in claim 73 wherein a raster element comprises a plurality of pixels.

Claim 68. Canceled.

69. (Currently amended) A 3D holographic image display system comprising:

(a) at least one complementary screen of one of light emitting or light source modulating devices in a two dimensional array of N (a real number) pixels, from which array of pixels a plurality of raster elements are generated;

(b) a raster multiplying system comprising an array of optically inter-related light dividing elements, each said light dividing element to divide the light of said plurality of raster elements of the complementary screen into parts, a first section of said array arranged to directly receive light from said complementary screen, a part of which directly

received light is passed to at least one other section of said array, the light directly received by said first section of said array and the light passed to said at least one other section of said array divided into components to form copies of said generated raster elements of a said at least one complementary screen, with said raster element copies forming a raster in P blocks with each block generally comprising a two dimensional array ~~of~~ of said raster element copies;

(c) an array of controllable modulators located after said raster multiplying system, each modulator of said array to independently modulate the raster elements of one of said P blocks;

(d) a single surface on which ~~a~~ hologram blocks of total number of M pixels are formed, where the number M exceeds number N and where said surface preceding components of (a), (b) and (c) are placed in the mentioned order of the light path of the complementary screen; and

(e) a coherent light producing means for producing a 3D holographic image from said surface.

Claim 70. Canceled.

71. (Previously presented) A system as in claim 48 used for image recording further comprising:

(e) instead of said image surface a photosensitive plane on which an outer image to be recorded is produced, said outer image comprising a plurality of said blocks, each block being of a two dimensional array of pixels, and all said blocks comprising said M pixels, where the number M exceeds the number N, and where said system components of (a), (b) and (c) are placed in the mentioned order of the light path of the complementary screen; and

(f) means to scan said outer image on said photosensitive plane into electric signals for recording.

Claim 72. Canceled.

73. (Previously presented) A method as in claim 57 used for image recording wherein said image display surface of step (e) comprises a photosensitive plane on which an outer image is produced and further comprising that step (b) is followed by:

(f) converting the image information received on said plane by the projection of said beam components into P electric signals, one signal for one of said P blocks, for recording received information for P separate image elements; and

(g) repeating the procedure by successively generating other raster elements on said complementary screen, to simultaneously scan each of P blocks.

Claim 74. Canceled.

75. (Previously presented) A method as in claim 57 further comprising the step of generating a 3D image from said image display surface.

76. (Previously presented) A method as in claim 57 further comprising the step of subjecting raster elements of said complementary screen to additional optical compression for increasing brightness and pixel density.

77. (Previously presented) A system as in claim 48 further comprising means for optic compression of complementary screen raster elements for increasing brightness and pixel density.

78. (Previously presented) A system as in claim 48 further comprising partly transparent mirrors as said light dividing elements.

Claim 79. Canceled.

80. (Previously presented) An image display system as claimed in claim 48 further comprising a light conductor to transmit the light from said complementary screen to the image surface via said raster multiplying system light receiving part.

81. (Previously presented) A method as claimed in claim 57 further comprising using a light conductor to transmit the light from said complementary screen to the image surface via said raster multiplying system light receiving part.